

**WHAT IS CLAIMED IS:**

1. A shelf talker for displaying short and longer term information, comprising:
  - a) a backplane including a plurality of electrical conductors;
  - b) a plurality of single character display chips mounted on the backplane in electrical contact with the electrical conductors for displaying the short term information; and
  - c) a graphic overlay located over the backplane bearing the longer term information and defining apertures for displaying the short term information displayed by the character chips.
2. The shelf talker claimed in claim 1, wherein the single character chips are capable of displaying numbers between 0 and 9, a dollar sign, a cent sign, a slash and a decimal point.
3. The shelf talker claimed in claim 1, wherein the single character chips are mounted on the backplane with conductive adhesive.
4. The shelf talker claimed in claim 1, wherein the longer term information may include a universal product code (UPC).
5. The shelf talker claimed in claim 1, wherein the longer term information may include a product description.
6. The shelf talker claimed in claim 1, wherein the longer term information may include a unit price.
7. The shelf talker claimed in claim 1, wherein the longer term information may include a graphic logo.

8. A single character display chip, comprising:

- a) support layer;
- b) an unpatterned first conductor layer on the support layer;
- c) a layer of bistable cholesteric liquid crystal material located over the unpatterned first conductor layer, leaving a portion of the first conductor layer exposed for making electrical contact with the first conductor layer; and
- d) a patterned conductor layer defining a plurality of character elements located over the layer of bistable cholesteric liquid crystal material.

9. The single character display chip claimed in claim 8, wherein the single character chips are capable of displaying numbers between 0 and 9, a dollar sign, a cent sign, a slash and a decimal point.

10. A shelf talker display system, comprising:

- a) a shelf talker for displaying short and longer term information, the shelf talker including a backplane including a plurality of electrical conductors, a plurality of single character display chips mounted on the backplane in electrical contact with the electrical conductors for displaying the short term information, and a graphic overlay located over the backplane bearing the longer term information and defining apertures for displaying the short term information displayed by the character chips; and
- b) a shelf talker writer including an arrangement of electrical contacts for making contact with the electrical conductors, and a driver for applying drive signals to the electrical contacts to cause the display chips to display the short term information.

11. The shelf talker display system claimed in claim 10, further comprising a central computer for determining the short term information to be displayed by the shelf talker, and means for communicating the short term information to the shelf talker writer.

12. The shelf talker display system claimed in claim 10, wherein the single character chips are capable of displaying numbers between 0 and 9, a dollar sign, a cent sign, a slash and a decimal point.

13. The shelf talker display system claimed in claim 10, wherein the single character chips are mounted on the backplane with conductive adhesive.

14. The shelf talker display system claimed in claim 10, wherein the longer term information may include a universal product code (UPC).

15. The shelf talker display system claimed in claim 10, wherein the longer term information may include a product description.

16. The shelf talker display system claimed in claim 10, wherein the longer term information may include a unit price.

17. The shelf talker display system claimed in claim 10, wherein the longer term information may include a graphic logo.

18. The shelf talker display system claimed in claim 10, further comprising a printer for printing the longer term information on the graphic overlay.

19. The shelf talker display system claimed in claim 10, wherein the longer term information includes a universal product code (UPC), and further comprising a UPC reader for reading the UPC and using the UPC to locate the short term information to be displayed by the shelf talker.

20. The shelf talker display system claimed in claim 10, wherein the shelf talker writer further includes a digital camera for capturing an image of the

information written by the shelf talker writer, and optical character recognition means for verifying that the written information is the desired information.

21. A shelf talker for displaying short and longer term information, comprising:

a) a backplane including a first insulating layer, a plurality of electrical conductors and associated electrical contacts formed on the first insulating layer, and a second insulating layer arranged over the electrical conductors and defining apertures for making electrical contact to the electrical conductors;

b) a plurality of single character chips for displaying short term information, each character chip including an unpatterned first conductor layer, a patterned conductor layer defining a plurality of character elements, and a layer of cholesteric bistable liquid crystal material located between the first and second conductor layers, the single character chips being mounted on the backplane in selected locations such that the conductor elements make electrical contact with the electrical conductors through the apertures; and

c) a graphic overlay located over the backplane bearing longer term information and defining apertures for displaying the short term information displayed by the character chips.

22. A shelf talker writer for writing short term information onto a shelf talker having a bistable electronically writable display having electrical conductors, comprising;

a) an arrangement of electrical contacts for making contact with the electrical conductors;

b) a driver for applying drive signals to the electrical contacts to cause the display to display the short term information; and

c) a digital camera for capturing an image of the display to be used to verify that the short term information was correctly written to the display.

23. A shelf talker for displaying short and longer term information, comprising:

a) a backplane including a first insulating layer, a plurality of electrical conductors and associated electrical contacts formed on the first insulating layer, and a second insulating layer arranged over the electrical conductors and defining apertures for making electrical contact to the electrical conductors;

b) a plurality of display chips comprised of multiple characters for displaying short term information, each display chip including an un-patterned first conductor layer, a patterned conductor layer defining a plurality of character elements, and a layer of cholesteric bistable liquid crystal material located between the first and second conductor layers, the multiple character display chip being mounted on the backplane in selected locations such that the character elements make electrical contact with the electrical conductors through the apertures; and

c) a graphic overlay located over the backplane bearing longer term information and defining apertures for displaying the short term information displayed by the display chips.